

**COOLING TUBE WITH POROUS INSERT
AND METHOD OF OPERATION THEREOF**

ABSTRACT OF THE DISCLOSURE

An injection-molding machine cooling tube, which cools molded plastic parts, includes a porous cooling tube having an outer surface and an inner surface. Preferably, the porous cooling tube has a porosity in the range of 3-20 microns. A cooling fluid passageway is preferably disposed adjacent the porous cooling tube outer surface and is configured to carry a cooling fluid to extract heat from the porous cooling tube. Fluid flow structure, preferably a vacuum, is configured to cause a molded plastic part inside the porous cooling tube to expand into contact with at least a portion of the inner surface of the porous cooling tube.